ELECTRIC FENCE SYSTEMS

CONNECTING YOU AND YOUR LAND www.pel.co.nz

Since 1968 PEL has been at the forefront of rural development, bringing clever ideas to farmers and the agricultural industry.

Using a common sense approach, PEL has spent over 40 years making electric fencing easier and more efficient. More importantly we provide fence systems that last, and like our customers, our fences work day in and day out, rain, hail or shine.

Our products are backed with a warranty – guaranteeing they'll do the job.

NEED MORE HELP?

Visit www.pel.co.nz for more information about our range, contact details and PEL stockists. Alternatively, refer to the back page for your local Tru-Test Group office.

ABOUT TRU-TEST GROUP

You will find Tru-Test Group brands in 70 countries worldwide. For more than a century products from the Tru-Test Group have been well and truly tested by people on the land.

The result is products and services uniquely attuned to farmers, and livestock producers needs wherever they may be in the world.

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ENERGIZERS

You can rely on PEL to deliver maximum power. We are proud to hold the world record for the most powerful energizer ever manufactured* - the 863R.

PEL energizers are the result of decades of intense research and development. Our energizer range features unique technologies which gives them a market leading edge. PEL is connecting you and your land.

* As at Nov 2011

CHOOSING YOUR PEL ENERGIZER.

PEL OFFERS A RANGE OF ENERGIZERS TO SUIT THE WAY YOU MANAGE YOUR FARM.

MAINS RANGE

A mains powered energizer is the most cost-effective, reliable way to power a permanent electric fence. Unigizers™ are also compatible with mains power.

Powers from 200 – 630 km (275 – 850 acres) of fence
Mains energizers see pg 7
Unigizers see pg 10

UNIGIZER™ RANGE

A Unigizer is a flexible, all-in-one mains and battery energizer with solar compatibility. It is a versatile solution that works across permanent, semi-permanent and temporary fencing.

Powers from 5 – 150 km (8 – 225 acres) of fence
Unigizers see pg 10

BATTERY RANGE

Convenient, portable and quick to set up, battery units are suitable for temporary, strip grazing and semi-permanent fencing. Unigizers are also compatible with battery power.

Powers from 1 – 4 km of fence
Battery energizers see pg 15
Unigizers see pg 10

SOLAR RANGE

Ideal for isolated areas where no mains power is available. Suitable for strip grazing, permanent, semi-permanent and temporary fencing. Our Solar Kits provide remote power for permanent installations. Our Portable Solar Energizers are an all-in-one solution with built-in solar panel and battery. The Unigizer range is also solar compatible.

Powers from 2 – 150 km (up to 225 acres) of fence
Solar Battery energizers see pg 17
Solar Kits and Panels see pg 19
Portable Solar energizers see pg 21
Unigizers see pg 10

Easy to follow packaging

Here's what to look for when you are in-store:

OUTPUT ENERGY (joules): Maximum amount of energy (joules) that will travel from the energizer to the fence line
STORED ENERGY (joules): Maximum amount of energy (joules) that is stored by the energizer
ACRES / HA: An approximate indication of the area that the energizer will electrify
KM / MILES: The maximum length of fence the energizer will power
PEL
630 KM
863R

Comparing Energizers

When evaluating energizers, be sure to compare them on the same basis. It is best to compare energizers by looking at the Maximum Output Energy (joules).

	What distance/area do you want the energizer to power?	How will you power your fence?	Recommended energizer	Page	Stored Energy (joules)	Maximum Output Energy (joules)
LARGE	**Up to 630 km** 850+ acres (350 ha)	Mains	863RS† / 863R†	Pg 9	97 J	63 J
	Up to 360 km 500 acres (200 ha)	Mains	836RS† / 836R†	Pg 9	54 J	36 J
	Up to 200 km 275 acres (110 ha)	Mains	820R†	Pg 9	34 J	22 J
MEDIUM	**Up to 180 km** 270 acres (110 ha)	Mains / Battery / Solar	418i†	Pg 13	24 J	18 J
	Up to 150 km 225 acres (90 ha)	Mains / Battery / Solar	415i*	Pg 13	20 J	15 J
	Up to 120 km 180 acres (70 ha)	Mains / Battery / Solar	412i†	Pg 13	16 J	12 J
	Up to 60 km 90 acres (30 ha)	Mains / Battery / Solar	406i / 406†	Pg 13	9 J	6 J
SMALL	**Up to 30 km** 45 acres (18 ha)	Mains / Battery / Solar	403	Pg 14	4.5 J	3 J
	Up to 20 km 30 acres (12 ha)	Mains / Battery / Solar	402	Pg 14	2.7 J	2 J
	Up to 10 km 15 acres (6 ha)	Mains / Battery / Solar	401	Pg 14	1.4 J	1 J
	Up to 5 km 8 acres (3 ha)	Mains / Battery / Solar	400†	Pg 14	0.7 J	0.5 J
	Up to 10 km	Battery / Solar	705S	Pg 23	0.63 J	0.5 J
	Up to 4 km	Battery	104B†	Pg 17	0.4 J	0.33 J
	Up to 3 km	Battery	103B†	Pg 18	0.29 J	0.23 J
	Up to 2 km	Battery	102B†	Pg 18	0.22 J	0.17 J
	Up to 2 km	Battery / Solar	702S	Pg 23	0.2 J	0.15 J
	Up to 2 km	Battery / Solar	101B	Pg 17	0.16 J	0.12 J
	Up to 1 km	Battery	5B	Pg 17	0.05 J	0.04 J

* = Europe only † = Available in selected markets

NOTE: Area recommendations are a guide only and in multiple wire terms. Performance will be affected by the condition of your fence. For installation instructions visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual.

MAINS ENERGIZERS

PEL mains powered energizers are high performing, powerful units designed for extensive electric fence systems.

PEL Mains Energizer features explained:

CYCLIC WAVE™ TECHNOLOGY

Provides a cleaner, more powerful pulse, maximising the energy that travels down the fence for optimal stock control.

BI-POLAR COMPATIBILITY

Enables the user to power a fence system to perform exceptionally well in dry, low conductive soil.

REMOTE CAPABLE

Using a PEL fence remote (with remote capable PEL energizers) enables you to switch the energizer on or off from anywhere along the fence line. This makes it easy to manage repairs and maintenance.

INDICATOR LIGHTS (VOLTAGE)

Easy to read light bar display provides an instant measure of the energizer output voltage for quick fence diagnostics. The LED display shows red when heavily loaded.

COMPACT, RUGGED DESIGN

Hi-tech components and advanced research and development have enabled us to make powerful energizers in a compact, rugged, polymer case.

LARGE TERMINALS

Mounted on the front of the energizer casing for convenience, these large terminals are easily adjusted and accept up to two fence wires. The slotted terminals make inserting wires and getting a good connection easy.

LOW INTERFERENCE

Cyclic Wave™ technology delivers outstanding fence performance and helps to minimise electromagnetic interference in line with international EMC standards.

LOAD RESPONSE FEATURE

Controls energizer output to match conditions, providing maximum fence voltage for effective stock control.

2 YEAR WARRANTY

We stand behind the reliability of our products. Visit www.pel.co.nz for full warranty details.

COMPARING MAINS ENERGIZERS

For mains powered Unigizer™ specifications see Comparing Unigizers table on pg 12.

	863RS / 863R	836RS / 836R	820R
Distance/area you want the energizer to power	630 km 850 acres 350 ha	360 km 500 acres 200 ha	200 km 275 acres 110 ha
Maximum Output Energy	63 J	36 J	22 J
Maximum Stored Energy	97 J	54 J	34 J
No Load Voltage	9,500 V	9,300 V *7,600 V Europe*	9,500 V *7,300 V Europe*
Medium Load Voltage @ 500 Ω	8,500 V	8,600 V *6,700 V Europe*	8,800 V *6,600 V Europe*
Heavy Load Voltage @ 100 Ω	9,600 V	8,100 V *6,800 V Europe*	6,000 V *6,000 V Europe*
Minimum Number of Earth Rods	10	8	8
Input Voltage	220 - 240 V	100 - 240 V	100 - 240 V

863RS / 863R

863RS Remote with Fault Finder included
863R Remote capable (Remote sold separately 806742)
MOST POWERFUL ENERGIZER IN THE WORLD*

Powers up to 630 km (850+ acres / 350 ha) of fence
63 J maximum output energy (97 J stored energy)

- Cyclic Wave™ technology
- Bi-polar technology
- Remote capable
- Indicator lights (voltage)
- Compact, rugged, design
- Large terminals
- Low interference
- Load response feature
- Half voltage terminal
- 2 year warranty.

*AS AT NOV 2011

836RS / 836R

836RS Remote with Fault Finder included
836R Remote capable (Remote sold separately 806742)

Powers up to 360 km (500 acres / 200 ha) of fence
36 J maximum output energy (54 J stored energy)

- Cyclic Wave™ technology
- Bi-polar technology
- Remote capable
- Indicator lights (voltage)
- Compact, rugged, design
- Large terminals
- Low interference
- Half voltage terminal
- 2 year warranty.

820R

820R Remote capable (Remote sold separately 806742)

Powers up to 200 km (275 acres / 110 ha) of fence
22 J maximum output energy (34 J stored energy)

- Cyclic Wave™ technology
- Bi-polar technology
- Remote capable
- Indicator lights (voltage)
- Compact, rugged design
- Large terminals
- Low interference
- Half voltage terminal
- 2 year warranty.

UNIGIZERS™

PEL Unigizers give you a versatile 3-in-1 solution to manage your electric fence system. You have the flexibility to choose from either mains, battery or solar energy to power your electric fence. The 3-in-1 capability allows the Unigizer to be used for temporary, semi-permanent, permanent and strip grazing fence systems. It's never been easier to create an electric fencing solution.

PEL Unigizer™ features explained:

CYCLIC WAVE™ TECHNOLOGY

Provides a cleaner, more powerful pulse, maximising the energy that travels down the fence for optimal stock control.

BI-POLAR TECHNOLOGY

Enables the user to power a fence system to perform exceptionally well in dry, low conductive soil.

SOLAR COMPATIBLE

Electrify your fence with solar power by connecting solar panels to any PEL Unigizer. The solar panels charge the battery connected to the Unigizer, for reliable livestock control.

REMOTE CAPABLE

Using a PEL fence remote (with remote capable PEL energizers) enables you to switch the energizer on or off from anywhere along the fence line. This makes it easy to manage repairs and maintenance.

LCD VOLTAGE DISPLAY

Displays output voltage, battery voltage and earth voltage. LCD is backlit for viewing in poor light conditions. On selected models only.

INDICATOR LIGHTS (VOLTAGE & BATTERY)

Easy to read light bar display provides an instant measure of the Unigizer output voltage and battery condition for quick fence diagnostics. The LED display shows red when heavily loaded.

BATTERY SAVER

Microprocessor technology automatically adjusts the output energy depending on the battery condition. This feature extends battery life and is particularly efficient when used in solar installations.

DAY/NIGHT SENSOR

Automatically adjusts pulse speed to contain or exclude animals based on day or night conditions.

LARGE TERMINALS

Mounted on the front of the energizer casing for convenience, these large terminals are easily adjusted and accept up to two fence wires. The slotted terminals make inserting wires and getting a good connection easy.

LOW INTERFERENCE

Cyclic Wave™ technology delivers outstanding fence performance and helps to minimise electromagnetic interference in line with international EMC standards.

EARTH MONITORING

Indicates earth system problems by monitoring the level of voltage around the earth system.

VERSATILE MOUNTING OPTIONS

Can be mounted on a wall, post or fence wire. Choose indoor or outdoor installation, depending on your fence location and power supply.

VERSATILE POWER OPTIONS

Can be conveniently installed in a range of locations using either mains, battery or solar power.

2 YEAR WARRANTY

We stand behind the reliability of our products. Visit www.pel.co.nz for full warranty details.

Comparing Unigizers™

	418i†	415i*	412i†	406i 406†	403	402	401	400†
Distance/area you want the energizer to power	180 km 270 acres 110 ha	150 km 225 acres 90 ha	120 km 180 acres 70 ha	60 km 90 acres 36 ha	30 km 45 acres 18 ha	20 km 30 acres 12 ha	10 km 15 acres 6 ha	5 km 8 acres 3 ha
Maximum Output Energy	18 J	15 J	12 J	6 J	3 J	2 J	1 J	0.5 J
Maximum Stored Energy	24 J	20 J	16 J	9 J	4.5 J	2.7 J	1.4 J	0.7 J
No Load Voltage	9,900 V	9,800 V	9,100 V	9,500 V	11,400 V	11,000 V	9,800 V	8,300 V
Medium Load Voltage @ 500 Ω	7,500 V	7,500 V	7,700 V	6,700 V	6,200 V	5,900 V	5,300 V	4,400 V
Minimum Number of Earth Rods	6	6	6	4	3	3	2	1
Input Voltage	12 V / 110 - 240 V	12 V / 100 - 240 V	12 V / 100 - 240 V	12 V / 100 - 240 V	12 V / 100 - 240 V	12 V / 100 - 240 V	12 V / 100 - 240 V	12 V / 100 – 240 V

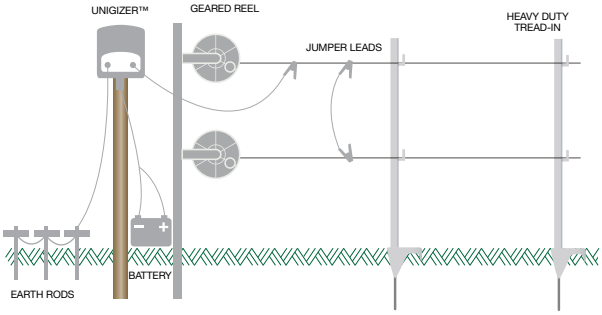
* = Europe only † = Available in selected markets

NOTE: Area recommendations are a guide only and in multiple wire terms. Performance will be affected by the condition of your fence. For installation instructions visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual.

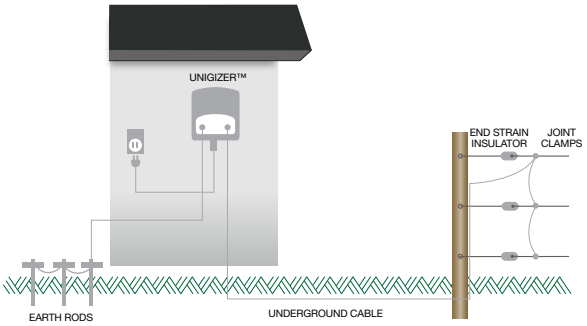
Unigizer Mounting Examples

Sample diagrams showing Unigizer and earth system. The number of earth rods will vary, depending on the Unigizer and soil conditions.

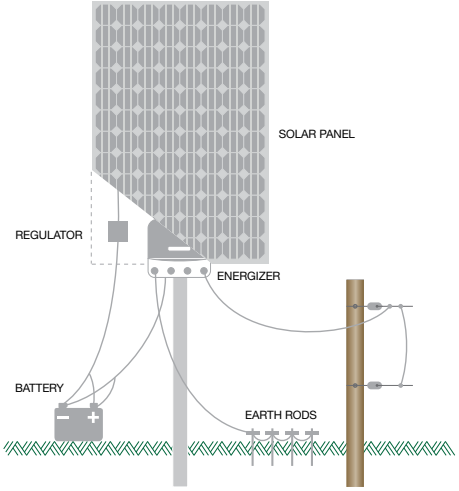
OUTDOORS WITH 12 V BATTERY



INDOOR DRY LOCATIONS WITH MAINS POWER ADAPTOR



OUTDOORS WITH 12 V BATTERY AND UNIGIZER SOLAR KIT



418i

Powers up to 180 km (270 acres / 110 ha) of fence
18 J maximum output energy (24 J stored energy)

- Cyclic Wave™ technology
- Solar compatible
- Remote capable (remote sold separately 806742)
- LCD Voltage Display
- Indicator lights (voltage & battery)
- Battery saver
- Day/Night sensor
- Large terminals
- Low Interference Earth monitoring
- Versatile mounting & power options
- Low energy terminal
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

Available in selected markets.

415i

Powers up to 150 km (225 acres / 90 ha) of fence
15 J maximum output energy (20 J stored energy)

- Cyclic Wave™ technology
- Solar compatible
- Remote capable (remote sold separately 806742)
- LCD Voltage Display
- Indicator lights (voltage & battery)
- Battery saver
- Day/Night sensor
- Large terminals
- Low Interference Earth monitoring
- Versatile mounting & power options
- Time delay
- Audible & visual alarm
- Low energy terminal
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

Available in Europe only.

412i

Powers up to 120 km (180 acres / 70 ha) of fence
12 J maximum output energy (16 J stored energy)

- Cyclic Wave™ technology
- Bi-polar technology
- Solar compatible
- Remote capable (remote sold separately 806742)
- LCD Voltage Display
- Indicator lights (voltage & battery)
- Battery saver
- Day/Night sensor
- Large terminals
- Low Interference Earth monitoring
- Versatile mounting & power options
- Half voltage terminal
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

Available in selected markets.

406i / 406

Powers up to 60 km (90 acres / 36 ha) of fence
6 J maximum output energy (9 J stored energy)

- Cyclic Wave™ technology
- Bi-polar technology
- Solar compatible
- Indicator lights (voltage & battery)
- Battery saver
- Day/Night sensor
- Large terminals
- Low Interference Earth monitoring
- Versatile mounting & power options
- Half voltage terminal
- Adjustable settings & pulse speeds
- 2 year warranty.

Additional features in the 406i include:

- Remote capable (remote sold separately 806742)
- LCD Voltage Display
- Earth monitoring.

Both include battery lead & mains power adaptor.

406 available in selected markets.

403

Powers up to 30 km (45 acres / 18 ha) of fence
3 J maximum output energy (4.5 J stored energy)

- Solar compatible
- Indicator lights (voltage & battery)
- Day/Night sensor
- Large terminals
- Versatile mounting & power options
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

402

Powers up to 20 km (30 acres / 12 ha) of fence
2 J maximum output energy (2.7 J stored energy)

- Solar compatible
- Indicator lights (voltage & battery)
- Day/Night sensor
- Large terminals
- Versatile mounting & power options
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

401

Powers up to 10 km (15 acres / 6 ha) of fence
1 J maximum output energy (1.4 J stored energy)

- Solar compatible
- Indicator lights (voltage & battery)
- Day/Night sensor
- Large terminals
- Versatile mounting & power options
- Adjustable settings & pulse speeds
- 2 year warranty.

Includes battery lead & mains power adaptor.

400

Powers up to 5 km (8 acres / 3 ha) of fence
0.5 J maximum output energy (0.7 J stored energy)

- Solar compatible
- Indicator light (pulse)
- Large terminals
- Versatile mounting & power options
- 2 year warranty.

Includes mains power adaptor.

Available in selected markets.

BATTERY ENERGIZERS

PEL battery energizers provide a portable and practical solution for strip grazing and large or small electric fence systems.

Comparing Battery Energizers

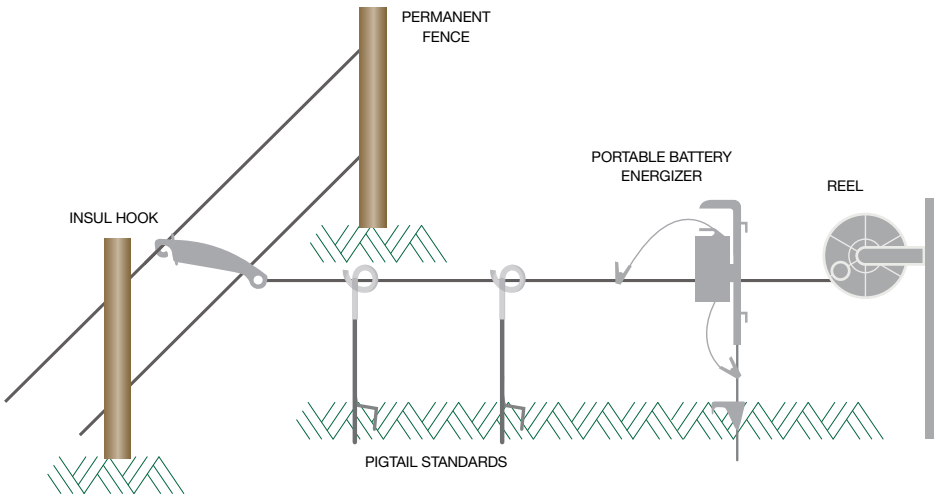
For battery powered Unigizer™ specifications see Comparing Unigizers table on pg 12.

	STRIP GRAZING ENERGIZERS		9 VOLT ENERGIZERS		
	101B	5B	104B†	103B†	102B†
Distance/area you want the energizer to power	2 km	1 km	4 km	3 km	2 km
Maximum Output Energy	0.12 J	0.04 J	0.33 J	0.23 J	0.17 J
Maximum Stored Energy	0.16 J	0.05 J	0.43 J	0.29 J	0.22 J
No Load Voltage	8,000 V	5, 800 V	8, 700 V	8, 700 V	8, 400 V
Light Load Voltage @ 2000 Ω	4,500 V	2,800 V	5,900 V	5,600 V	5, 300 V
Standard Load Voltage @ 1000 Ω	–	–	4, 400 V	4, 200 V	3, 900 V
Medium Load Voltage @ 500 Ω	–	–	–	–	–
Minimum Number of Earth Rods	1	1	1	1	1
Battery Type (Sold Separately)	4 x D batteries or 12 V or 6 V external battery	2 x D batteries	9 V internal or 12 V external battery	9 V internal or 12 V external battery	9 V internal or 12 V external battery

† = Available in selected markets

NOTE: Area recommendations are a guide only and in multiple wire terms. Performance will be affected by the condition of your fence. For installation instructions visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual.

Portable Battery Energizer Mounting Example



101B with stand

101B

POWERFUL AND VERSATILE STRIP GRAZING UNIT.

Powers up to 2 km of fence
0.12 J maximum output energy (0.16 J stored energy)

Simple set up
On/Off switch
Fast & slow options
Optional tread-in stand
Flashing LED
2 year warranty.

101B with solar*

EXTEND THE LIFE OF YOUR BATTERIES.

Powers up to 2 km of fence
0.12 J maximum output energy (0.16 J stored energy)

Simple set up
On/Off switch
Fast & slow options
Optional tread-in stand
Flashing LED
2 year warranty.

* Solar panel runs energizer during the day and extends battery life.

5B

Powers up to 1 km of fence
0.04 J maximum output energy (0.05 J stored energy)

Simple set up
On/Off switch
Intelligent battery management to extend battery life
2 year warranty.

104B

Powers up to 4 km of fence
0.33 J maximum output energy (0.4 J stored energy)

Day/Night sensor
Dual power supply options*
Adjustable pulse speed
6 position rotary switch
3 stage light bar
Durable weather & UV resistant case
2 year warranty.

Includes earth stand & fence lead set.

*Uses 9 V or 12 V internal battery or 12 V external battery (sold separately).

Available in selected markets.

103B

Powers up to 3 km of fence
0.23 J maximum output energy (0.29 J stored energy)

- Day/Night sensor
- Dual power supply options*
- Adjustable pulse speed
- 6 position rotary switch
- 3 stage light bar
- Durable weather & UV resistant case.
- 2 year warranty.

Includes earth stand & fence lead set.

*Uses 9 V or 12 V internal battery or 12 V external battery (sold separately).

Available in selected markets.

102B

Powers up to 2 km of fence
0.17 J maximum output energy (0.22 J stored energy)

- Dual power supply options*
- Pulse light indicator
- On/Off switch
- Durable weather & UV resistant case.
- 2 year warranty.

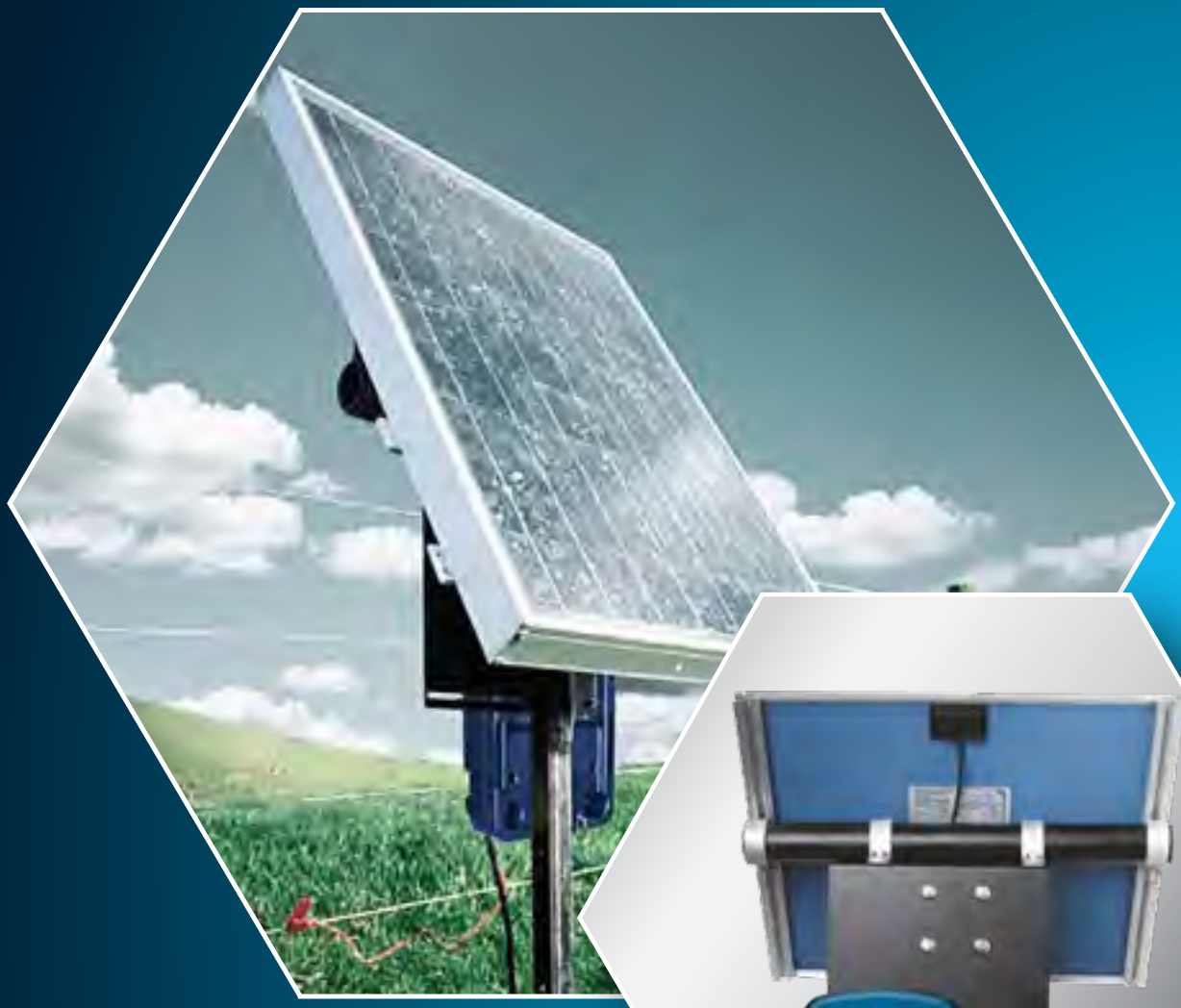
Includes earth stand & fence lead set.

*Uses 9 V or 12 V internal battery or 12 V external battery (sold separately).

Available in selected markets.

SOLAR KITS AND PANELS

PEL offers a range of solar energizer kits and solar components for solar compatible energizers.



PEL Solar Kits and Panels features explained:

Innovations in technology mean solar installations are now a practical and cost effective method of powering areas where mains power is either unavailable or impractical.

PEL solar panels and energizers feature high-tech materials and are engineered to rigorous quality standards. This means you can trust PEL to transfer energy with minimal loss. The end result is less battery drain while maintaining higher fence voltage.

Contact your local Tru-Test Group Area Sales Manager or PEL retailer/distributor for advice and warranty information. You'll find their details online at www.pel.co.nz. Alternatively, refer to the back cover for details of your local Tru-Test Group office.

Unigizer™ Solar Kits

Unigizers™ are a 3-in-1 solution and are particularly useful for solar installations. Choose from any Unigizer in the PEL range to pair with an appropriate Unigizer Solar Kit. For more information on our Unigizer range and specifications see page 12. Kit includes: Unigizer, Solar Panel(s) and Mounting Kit. Batteries not included.**

Solar Kit - 418i†	**Powers up to 180 km** (270 acres / 110 ha) of fence **18 J maximum output energy** (24 J stored energy)
Solar Kit - 415i*	**Powers up to 150 km** (225 acres / 90 ha) of fence **15 J maximum output energy** (20 J stored energy)
Solar Kit - 412i†	**Powers up to 120 km** (180 acres / 70 ha) of fence **12 J maximum output energy** (16 J stored energy)
Solar Kit - 406i	**Powers up to 60 km** (90 acres / 36 ha) of fence **6 J maximum output energy** (9 J stored energy)
Solar Kit - 406†	**Powers up to 60 km** (90 acres / 36 ha) of fence **6 J maximum output energy** (9 J stored energy)
Solar Kit - 403	**Powers up to 30 km** (45 acres / 18 ha) of fence **3 J maximum output energy** (4.5 J stored energy)
Solar Kit - 402	**Powers up to 20 km** (30 acres / 12 ha) of fence **2 J maximum output energy** (2.7 J stored energy)
Solar Kit - 401	**Powers up to 10 km** (15 acres / 6 ha) of fence **1 J maximum output energy** (1.4 J stored energy)

* = Europe only † = Available in selected markets
**NOTE: PEL recommends the use of deep cycle batteries. Requirements and availability of solar panels vary between different countries. Panels 40 W and above come with regulators to prevent over-charging. In Australia 10–80 W panels are regulated.

Solar Panel & Mounting Kit Options

Solar Panels and Mounting Kits are available in selected markets and kit options may vary in different countries. Solar Panels and Mounting Kits can be purchased separately to allow for repairs or upgrades to existing installations.

	PANEL & MOUNTING KIT
20 watt	✓
30 watt	✓
40 watt	✓
50 watt	✓
65 watt	✓
80 watt	✓
135 watt	✓
190 watt	✓

PORTABLE SOLAR ENERGIZERS

PEL portable solar energizers incorporate an internal battery and are perfect for strip grazing or powering a small area. These self contained energizers feature an integrated solar panel and a sophisticated battery management system in a rugged carry case.

Portable solar energizer features explained:

REQUIRES MINIMAL SUNLIGHT

Energizer requires minimal sunlight hours to keep battery at or near full charge. When fully charged selected portable energizers can operate for up to 21 days without sunlight.

INDICATOR LIGHT

Located on the rear of energizer indicates the solar energizer is working.

BATTERY SAVER

Microprocessor technology automatically adjusts the output energy depending on the battery condition. This feature is designed to extend battery life.

RUGGED DESIGN

Strong aluminium solar panel frame and UV resistant case provides maximum weather protection for extreme environments.

HIGH OUTPUT VOLTAGE

Up to 9,500 V output.

BATTERY RECHARGE

Energizer intelligently manages battery recharging during fine weather.

RECHARGEABLE INTERNAL BATTERY

Rechargeable internal sealed 12 V, 7 Ah battery included (optional in some markets). Maximum battery life is 3+ years.

STEEL AND WOOD POST MOUNTING OPTIONS

High impact enclosure is designed to securely mount on Y-posts and wood posts.

2 YEAR WARRANTY*

We stand behind the reliability of our products. Visit www.pel.co.nz for full warranty details.

*Excludes battery.
Batteries fitted inside energizers have a 90 day warranty.

Comparing Portable Solar Energizers

	705S	702S
Distance/area you want the energizer to power	10 km 8 acres 3 ha	2 km 3 acres 1.2 ha
Maximum Output Energy	0.50 J	0.15 J
Maximum Stored Energy	0.63 J	0.20 J
No Load Voltage	9,500 V	9,500 V
Light Load Voltage @ 2,000 Ω	7,400 V	5,300 V
Standard Load Voltage @ 1,000 Ω	6,100 V	3,700 V
Minimum Number of Earth Rods	1	1
Battery Type	12 V internal battery	12 V internal battery

NOTE: Area recommendations are a guide only and in multiple wire terms. Performance will be affected by the condition of your fence. For installation instructions visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual.

705S

Powers up to 10 km (8 acres / 3 ha) of fence
0.5 J maximum output energy (0.62 J stored energy)

- Requires minimal sunlight
- Indicator light (pulse)
- Battery saver
- Rugged design
- High output voltage
- Battery recharge
- Rechargeable internal battery
- Steel & wood post mounting options
- On/Off switch
- 2 year warranty.

702S

Powers up to 2 km (3 acres / 1.2 ha) of fence
0.15 J maximum output energy (0.2 J stored energy)

- Requires minimal sunlight
- Indicator light (pulse)
- Battery saver
- Rugged design
- High output voltage
- Battery recharge
- Rechargeable internal battery
- Steel & wood post mounting options
- On/Off switch
- 2 year warranty.

MANAGEMENT TOOLS

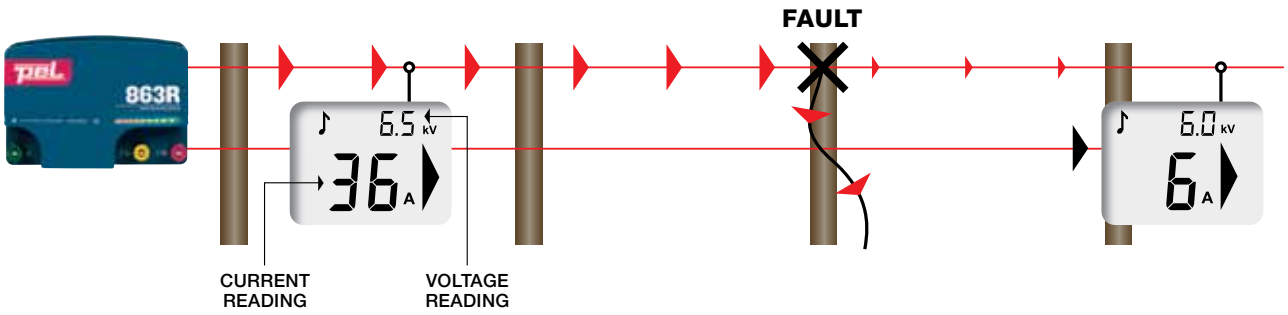
To get the maximum performance from an energizer you need to be able to measure and monitor your fence system effectively.

No matter how good an energizer is, if the fence line is badly insulated, has shorts, or is poorly earthed, it will perform well below its optimum. Advances in remote and fault-finding technology mean you can quickly locate and fix faults on your fence with a minimum of fuss.

FAULT FINDING EXPLAINED

HOW TO USE

Start near the energizer's lead-out wires with your PEL Remote with Fault Finder or your PEL Fault Finder. Move down the fence line following the arrow away from the energizer. Take readings at regular intervals and at any junction point.



The previous current reading is shown briefly in the top right corner of the screen so that you can compare readings. If the current reading suddenly falls, you have gone past a fault. Retrace your steps to find the fault. Note that after a few seconds the previous current reading will be replaced with the present voltage reading (kV).

TRACKER REMOTE WITH FAULT FINDER

- Quickly & easily locates faults along the fence line
- Large back-lit display
- Displays current, voltage & current direction simultaneously
- Displays previous current reading to compare values
- Audible current indicator
- Convenient belt clip
- Insulated, rugged, water resistant case
- Replaceable 9 V battery
- Low battery warning system
- Automatic energizer polarity detection
- Fault Finding option can be used with all energizers
- Turns compatible PEL energizers on or off from anywhere along the fence line
- 1 year warranty.*

806742 **EA**

TRACKER PV100 FAULT FINDER

- Quickly & easily locates faults along the fence line
- Large back-lit display
- Displays current, voltage & current direction simultaneously
- Displays previous current reading to compare values
- Audible current indicator
- Convenient belt clip
- Insulated, rugged, water resistant case
- Replaceable 9 V battery
- Low battery warning system
- Automatic energizer polarity detection
- Can be used with all energizers
- 1 year warranty.*

PV100 **EA**

*Excludes battery. Batteries fitted inside management tools have a 90 day warranty.

OTHER TOOLS

PV18 DIGITAL VOLTMETER

- Enables accurate testing of fence & energizer earth system
- Earth probe provides accurate fence to ground voltage measurements
- Readings from 200 V to 9,900 V in 100 V increments
- Rugged design
- Automatic On/Off
- Replaceable 9 V battery with a life of up to 18 months
- 1 year warranty.*

Available in selected markets.

806213 **EA**

PV5 FENCE TESTER

- Handy, pocket-sized unit for testing general fence condition
- Shows if fence is live & measures approximate voltage
- Readings from 1,000 V to 5,000 V in 1,000 V increments
- Easy to read voltage markings
- No battery required
- 1 year warranty.

11005FT **EA**

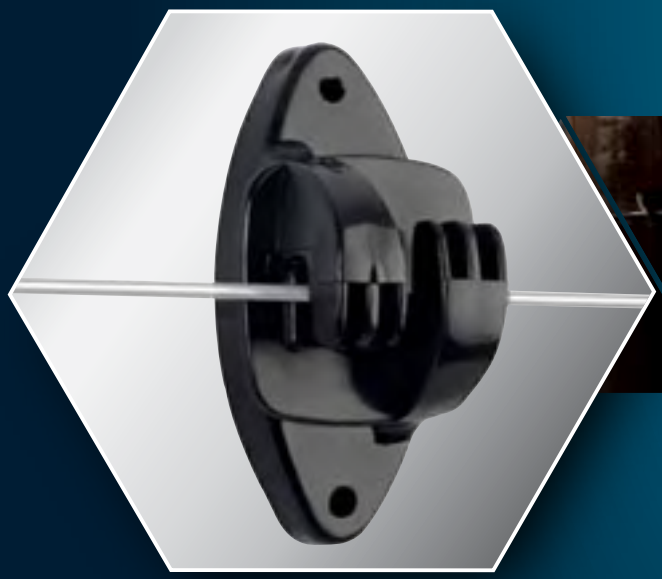
PA36 FENCE ALERT

- Warning light begins flashing when voltage is too low
- Visible up to 1.5 km away
- Rugged impact & water resistant case
- Can be used on any type of electric fence including steel wire & portable poli products
- Works with all energizers
- No ground wires or external power sources required
- Battery life 5 years on standby or up to 2 weeks of continuous flashing
- Two preset voltage triggers can be selected
- Replaceable CR2032 lithium button cell battery
- 1 year warranty.*

300361 **EA**

*Excludes battery. Batteries fitted inside management tools have a 90 day warranty.

PERMANENT ELECTRIC FENCING

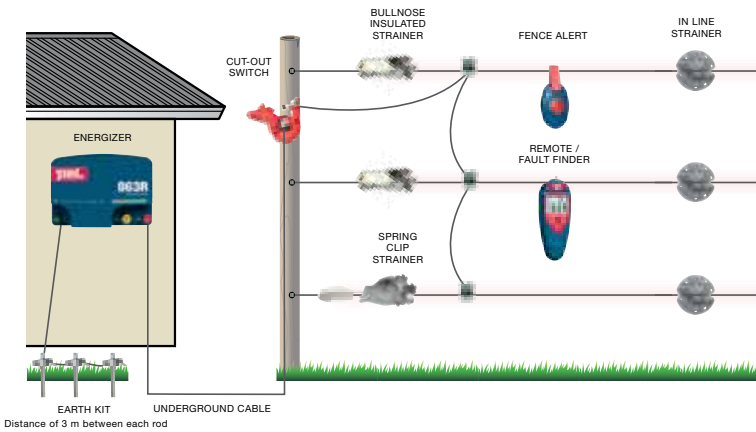


Permanent Electric Fence System

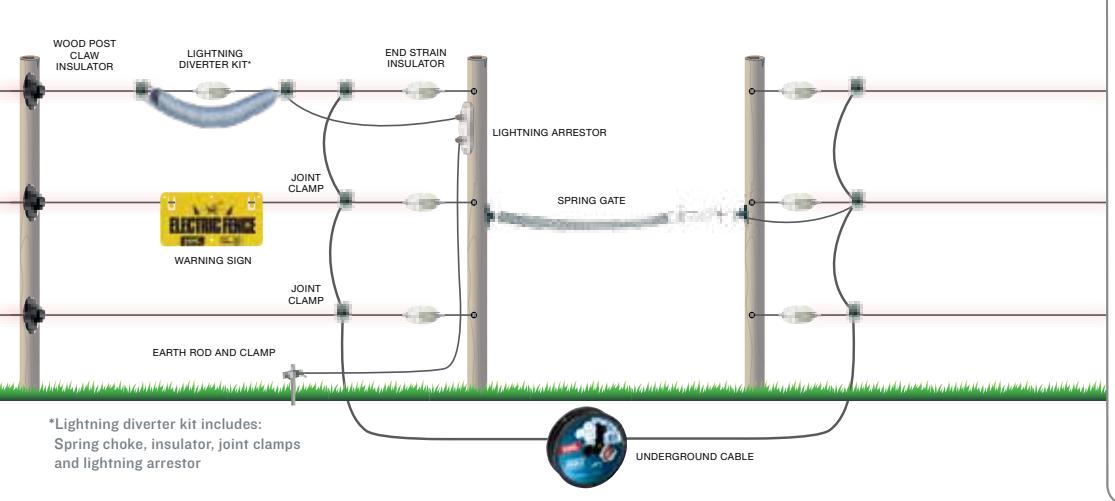
Permanent Electric Fencing is a flexible, durable and economical fencing solution. Easy to install and operate with less maintenance.

It is also a safer fencing solution for your stock. Reduces animal contact with the fence and is less likely to injure should a fence be breached.

PEL has a range of equine products for use in permanent electric fencing. Look for the horse logo to identify the PEL equine range.



These products are recommended to ensure top performance of your permanent electric fence system. Diagram is an example only. For more details on permanent electric fencing design visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual.



*Lightning diverter kit includes: Spring choke, insulator, joint clamps and lightning arrestor

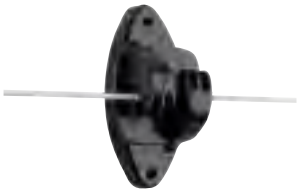
PERMANENT ELECTRIC FENCE SYSTEM CHECKLIST

TICK HERE	Do you have:
☐	Mains, Unigizer™ or battery powered energizer
☐	Earth kit
☐	Cut-out switches
☐	Fence alert(s)
☐	Remote/Fault Finder
☐	Wire strainers
☐	Post insulators
☐	Lightning diverter kit*
☐	Warning sign(s)
☐	Joint clamps
☐	End strain insulators
☐	Underground cable
☐	Gate hardware

Insulators

PEL insulators are reliable, strong and UV stabilised for long life.
All PEL insulators come with a 10 year warranty.

WOOD POST INSULATORS



PI85 WOOD POST CLAW INSULATOR

- Rugged claw design
- UV stabilised for long life
- Spark guard prevents arcing & increased distance from wire to post reduces risk of leakage
- Suitable for up to 4 mm (8 ga) wire, Poliwire or braid.

20085 **PK 25**
20085PS **PK 125**
814257 **CT 1000**

PI83 WOOD POST CLAW INSULATOR

- Rugged claw design
- UV stabilised for long life
- Spark guard prevents arcing & increased distance from wire to post reduces risk of leakage
- Suitable for up to 4 mm (8 ga) wire, Poliwire or braid.

815279 **CT 500**

PI81 WOOD POST PINLOCK INSULATOR

- Rugged pinlock design conveniently allows easy removal of wire
- UV stabilised for long life
- Spark guard prevents arcing & increased distance from wire to post reduces risk of leakage
- Suitable for up to 4 mm (8 ga) wire, Poliwire or braid.

20081 **PK 25**
20081PS **PK 125**
814256 **PK 1000**

PI84 WOOD POST STAPLE ON INSULATOR

- Ideal for smaller farms
- UV stabilised for long life
- Single piece moulding for easy application
- Suitable for up to 2.5 mm (12.5 ga) wire.

Includes diamond point staple.

808062 **PK 50**

JUMBO WOOD POST CLAW INSULATOR

- Use with up to 8 mm rope, braid, or electrified sighter wire
- UV stabilised for long life
- Spark guard prevents arcing & increased distance from wire to post reduces risk of leakage.

815709 **PK 25**

WOOD POST WIDE TAPE INSULATOR

- Use with up to 40 mm wide tape, rope, braid or electrified sighter wire
- UV stabilised for long life.

815712 **PK 25**

STEEL POST INSULATORS

WOOD POST WIDE TAPE CORNER/END INSULATOR

- Can be used as a corner or end strain insulator
- Can be used to tension tape
- Use with up to 40 mm tape
- UV stabilized for long life.

815710 **PK 2**

PI71 Y-POST PINLOCK INSULATOR

- Rugged self locking, tapered pins for easy removal of wires
- Pinlock design easily connects to steel posts
- UV stabilised for long life
- Spark guard prevents arcing & increased distance from wire to post reduces risk of leakage
- Suitable for up to 4 mm (8 ga) wire, Poliwire or braid.

20071 **PK 25**
821457 **PK 125 (COMING SOON)**

POST CAP TOPPER

- Side & top fixing options for up to 40 mm tape, Poliwire, rope, braid or electrified sighter wire
- UV stabilised for long life
- Easily attaches to T & Y-posts.

815713 **PK 10**

END STRAIN INSULATORS

PI44 END STRAIN INSULATOR WHITE

- Reinforced glass filled polymer for maximum strength
- Suitable for high strain use
- Superior UV stabilisation for long life
- Deep grooves hold wire in place & prevent twisting
- Long leakage path prevents arcing
- Use with most sizes of fence wire.

20044 **PK 25**

PI45 END STRAIN INSULATOR BLACK

- Suitable for medium strain use
- UV stabilised for long life
- Deep grooves hold wire in place & prevent twisting
- Long leakage path prevents arcing
- Use with most sizes of fence wire.

807543 **PK 25**

ROD POST INSULATOR

MULTI-FIT ROD POST INSULATOR

- Suitable for up to 4 mm (8 ga) wire or up to 7 mm rope, braid & Poliwire
- Back end slot with anti slip-out hooks holds tape up to 12 mm
- UV stabilised for long life
- Flexible design & heavy duty screw nut for a secure fit
- Spark guards prevent arcing & increased distance from wire to post reduces risk of leakage
- Fits rod posts 6 mm to 16 mm in diameter.

809587 **PK 25**

INSULTUBE

INSULTUBE

- Economical insulator fastened with staples (staples sold separately)
- Available pre-cut for convenience.

20030 **6 MM X 12 M ROUND COIL**
808344 **4 MM X 100 MM PK 50**
20053T **4 MM X 142 MM TRIANGLE PK 50**

Strainers

All PEL Strainers come with a 1 year warranty.

UNINSULATED STRAINERS

PA8 SPRING CLIP STRAINER

- Suitable for high strain & in-line use
- Spring clip design for easy tensioning
- Rust resistant
- Galvanised frame with aluminium spool
- Rugged & easy to use.

30008-50 **PK 10**

INSULATOR FOR SPRING CLIP STRAINER

- Attaches to uninsulated PA8 Spring Clip Strainer to create insulated end strain
- Reinforced glass filled polymer for maximum strength
- Suitable for high strain use
- Superior UV stabilisation for long life
- Deep grooves hold wire in place & prevent twisting
- Long leakage path prevents arcing
- Use with most sizes of fence wire.

30008INS **PK 10**

INSULATED STRAINERS

PA8-W WHITE INSULATED STRAINER

- Suitable for high strain use
- Spring clip design for easy tensioning
- Heavy duty insulator protects against arcing
- Rust resistant
- Galvanised frame with aluminium spool
- Rugged & easy to use
- UV stabilised for long life.

30008W-50 **PK 10**

PA8-B BLACK INSULATED STRAINER

- Suitable for medium strain use
- Spring clip design for easy tensioning
- Heavy duty insulator protects against arcing
- Rust resistant
- Galvanised frame with aluminium spool
- Rugged & easy to use
- UV stabilised for long life.

30008B-50 **PK 10**

PA8-P PORCELAIN INSULATED STRAINER

- Suitable for high strain use
- Spring clip design for easy tensioning
- Porcelain insulator for strength & durability
- Rust resistant
- Galvanised frame with aluminium spool
- Rugged & easy to use.

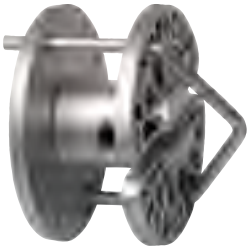
30008P-50 **PK 10**

BULLNOSE INSULATED STRAINER

- Suitable for high strain use
- Spring clip design for easy tensioning
- Heavy duty insulator protects against arcing
- Rust resistant
- Galvanised frame with aluminium spool
- Rugged & easy to use
- UV stabilised for long life.

815714 **PK 10**

INLINE STRAINER



IN LINE STRAINER

- Suitable for high strain use
- Can be added to fence without cutting wire
- Designed to work with PA17 In Line Strainer Handle or 12 mm drive ratchet
- Rust resistant
- Rugged & easy to use
- Light weight, high strength aluminium construction.

813400 **PK 25**

PA17 IN LINE STRAINER HANDLE

- Galvanised handle for In Line Strainer
- Rust resistant
- Rugged & easy to use.

RSTDSPH **EA**

Cable & Specialised Wire

Durable, reliable and UV stabilised for long life. We provide a I year warranty on all our cable and specialised wire products.

EXTREME UNDERGROUND CABLE

- Ideal for large properties with high powered energizers
- 2.7 mm (I2 ga) aluminium coated steel for extreme conductivity
- 8 x more conductive than I.6 mm underground cable
- Use with PEL Joint Clamps
- Resistance of II.5 ohms / km
- Easy to strip with soft steel core for greater flexibility
- Delivers more power over long distances.

805982 **I00 M CABLE**
8I8290 **500 M CABLE**

PI36 PREMIUM UNDERGROUND CABLE

- Suitable for all properties
- 2.5 mm (I2.5 ga) galvanised steel for greater conductivity
- 3 x more conductive than I.6 mm underground cable
- Use with PEL Joint Clamps
- Resistance of 35 ohms / km
- Easy to strip with soft steel core for greater flexibility.

805972 **25 M CABLE**
805973 **50 M CABLE**
805975 **I00 M CABLE**
8I4625 **500 M CABLE**

PI35 UNDERGROUND CABLE

- Ideal for small properties with low powered energizers
- I.6 mm (I4 ga) galvanised steel
- Use with PEL Joint Clamps
- Resistance of 90 ohms / km
- Easy to strip with soft steel core for greater flexibility.

805936 **25 M CABLE**
805937 **50 M CABLE**
805940 **I00 M CABLE**

PI96 ALUMINIUM COATED LEAD-OUT WIRE

- Ideal for long lead-out & high powered energizer installations
- 2.7 mm (I2 ga) aluminium coated steel for extreme conductivity
- 8 x more conductive than I.6 mm underground cable
- 3 x more conductive than standard 2.5 mm (I2.5 ga) galvanised wire
- Resistance of II.5 ohms / km
- Ideal for use in coastal and other corrosive environments.

8I4627 **2.7 MM X I,000 M ROLL**

ELECTRIFIED SIGHTER WIRE

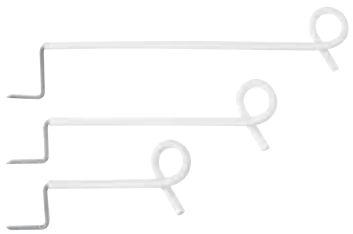
- High tensile wire coated in a conductive carbon compound to deliver low voltage shocks
- Highly visible to help prevent animal entanglement.

82I462 **WHITE 250 M (COMING SOON)**
82I463 **WHITE 400 M (COMING SOON)**
82I464 **BLACK 250 M (COMING SOON)**
82I465 **BLACK 400 M (COMING SOON)**

Outriggers

PEL Outriggers are backed by a I year warranty. They help preserve the life of existing conventional fences. Simply attach Outriggers and run an electrified wire through them to keep stock off the fence.

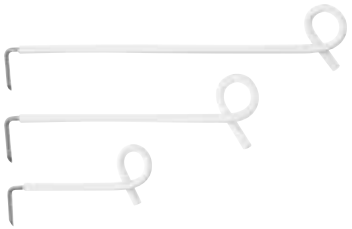
WOOD POST OUTRIGGERS



SIDE FIXING

- Galvanised spring steel construction
- UV stabilised for long life
- Available lengths:
  400 mm (PI94)
  270 mm (PI95)
  I50 mm (PI92).

884071 **400 MM PK 5** PI94
884072 **270 MM PK 5** PI95
884069 **I50 MM PK 5** PI92



TOP FIXING

- Galvanised spring steel construction
- UV stabilised for long life
- Available lengths:
  400 mm (PI93)
  270 mm (PI92)
  I50 mm (PI9I).

884070 **400 MM PK 5** PI93
809596 **270 MM PK 5** PI92
884068 **I50 MM PK 5** PI9I

PI90 DOUBLE ENDED

- Galvanised spring steel construction
- UV stabilised for long life
- Available length: 860 mm

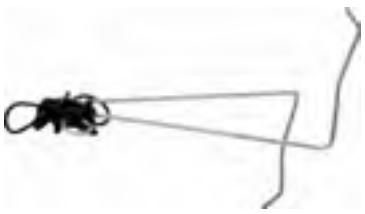
884067 **860 MM PK I0**

STANDOFFS

INSULATED WIRE STANDOFF

- Ideal for installing electric fencing onto existing non-electrified fences
- Constructed from high tensile galvanised steel
- UV stabilised insulated tubing
- Available lengths:
  230 mm long-tail (PI6I)
  230 mm short-tail (PI62)
  300 mm short-tail (PI66).

884060 **230 MM LONG-TAIL PK 5** PI6I
884061 **230 MM SHORT-TAIL PK 5** PI62
884065 **300 MM SHORT-TAIL PK 5** PI66



PI63 PINLOCK WIRE STANDOFF SHORT-TAIL

- Ideal for installing electric fencing onto existing non-electrified fences
- Constructed from high tensile galvanised steel
- UV stabilised pinlock insulator for easy wire insertion and removal
- Available length: 230 mm

20063 **230 MM PK 5**

Gate Hardware

All PEL gate products come with a 1 year warranty.

PA53 TAPE GATE - RED/WHITE

- Electrifies gateways up to 5 m wide
- Versatile & easy to install
- Fully insulated, heavy duty handle with protective guards & non-slip grip
- Designed for maximum visibility with 40 mm wide tape
- Tape contains 15 stainless steel strands for high conductivity.

Includes: Heavy duty insulated handle, 2 x Wood Post Pinlock Insulators, buckle, activator & 5 m of Premium Super 15 Gate Tape.

30053WRW **PK 1**

PA54 TAPE GATE HARDWARE KIT - COMPRESSION BLUE

- Fully insulated, Compression Gate Break Handle with heavy duty spring that compresses under tension, preventing over-stretching
- For custom length gateways
- For use with Premium Super 15 Gate Tape
- Versatile & easy to install.

Includes: Heavy duty Compression Handle, 2 x Wood Post Pinlock Insulators, buckle & activator (excludes tape).

30054C **PK 1**

PA54 TAPE GATE HARDWARE KIT - WHITE

- For custom length gateways
- For use with Premium Super 15 Gate Tape
- Versatile & easy to install
- Fully insulated, heavy duty handle with protective guards & non-slip grip.

Includes: Heavy duty insulated handle, 2 x Wood Post Pinlock Insulators, buckle & activator (excludes tape).

30054 **PK 1**

PA52 SPRING GATE

- Electrifies gateways up to 8 m wide
- Versatile & easy to install
- Fully insulated, heavy duty handle with protective guards & non-slip grip
- Galvanised rust resistant spring.

Includes: Heavy duty insulated handle, 2 x Wood Post Pinlock Insulators, activator & galvanised spring.

30052W **5 M WIDE PK 1**
80799I **8 M WIDE PK 1**

PA52-U ULTRA SPRING GATE

- Electrifies gateways up to 5 m wide
- Versatile & easy to install
- Fully insulated, heavy duty handle with protective guards & non-slip grip
- Yellow rust resistant spring.

Includes: Heavy duty insulated handle, 2 x Wood Post Pinlock Insulators, activator & yellow spring.

30052U **5 M WIDE PK 1**

BUNGY GATE

- Electrifies gateways & races up to 7 m or 11 m wide
- Versatile & easy to install
- Fully insulated handle with protective guards & non-slip grip
- Bungy cord with four stainless steel strands provides extreme stretch, high conductivity & maximum shock exposure.

Includes: Insulated handle, 2 x Wood Post Pinlock Insulators, activator, galvanised hook & bungy cord.

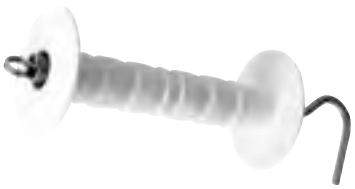
81571S **3.5 M – 7 M WIDE PK 1**
821458 **5.5 M - 11 M WIDE PK 1 (COMING SOON)**

HANDLES

PA5IC COMPRESSION SPRING GATE BREAK HANDLE

- High tensile, heavy duty spring compresses under tension, preventing over-stretching
- Non-slip insulated grip
- High density UV stabilised polyethylene for long life
- Heavy duty, rugged body with large protective guards.

3005IC **PK 20**



PA5IW HEAVY DUTY GATE BREAK HANDLE WHITE

- Non-slip insulated grip
- High density UV stabilised polyethylene for long life
- High tensile galvanised spring
- Heavy duty, rugged body with large protective guards.

3005IW **PK 20**

OTHER GATE PRODUCTS

PA52-A ACTIVATOR

- For use with all PEL gate break handles
- Three connection points for flexibility
- Long lasting hot dipped galvanised steel.

30052A5 **PK 5**

BUNGY CORD / BUNGY HOOK

- Heavy duty electrified shock cord with supreme elasticity
- 4 stainless steel wires cross over 10 x per cm for maximum conductivity
- Suitable for all livestock
- UV stabilised for long life
- Galvanised hook for bungy gate anchor.

821459 **BUNGY CORD 50 M COIL (COMING SOON)**
819027 **BUNGY CORD 200 M COIL**
814633 **BUNGY HOOK PK 10**

PAS100 TAPE GATE BUCKLE

- For use with Premium Super 15 Gate Tape
- Attaches to PI81 Wood Post Pinlock Insulator.

808003 **PK 10**

PREMIUM SUPER 15 GATE TAPE

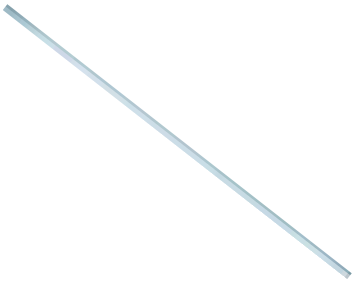
- 15 stainless steel strands
- 2.3 x more conductive than standard Politape
- Ideal for permanent & semi-permanent fencing or high traffic areas such as gateways
- 40 mm width for high visibility
- UV stabilised for long life

30055RW **50 M**

Semi-Permanent Posts

All PEL semi-permanent posts & accessories come with a 1 year warranty.

FIBREGLASS POST



FIBREGLASS POST

- UV stabilised, silicon bonded fibreglass rods
- Available in a range of sizes.

Available in selected markets.

809591 **13 MM X 2 M PK 10**
809068 **13 MM X 1.5 M PK 10**
809061 **13 MM X 1.2 M PK 10**
809067 **10 MM X 2 M PK 10**
809059 **10 MM X 1.5 M PK 10**
809058 **10 MM X 1.2 M PK 10**

POST ACCESSORIES

EZI CLIPS

- Use with 10 mm or 13 mm fibreglass posts.

W336 **10 MM PK 250**
W341 **13 MM PK 250**

DRIVE CAP

- Use with 10 mm and 13 mm fibreglass posts.

814635 **EA**

General Accessories

All PEL general accessories come with a 1 year warranty.

JOINT CLAMPS

HEAVY DUTY CLAW JOINT CLAMP

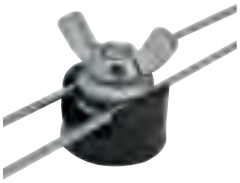
- Galvanised construction for superior rust resistance
- Claw design allow multiple connecting wires
- Suitable for wire up to 4 mm (8 ga).

819029 **PK 20 (COMING SOON)**

PA46 SPLIT BOLT JOINT CLAMP

- Solid zinc for superior corrosion resistance
- Ideal for coastal or other harsh environments
- Suitable for wire up to 2.7 mm.

808099 **PK 25**

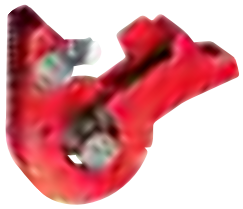


PA47 WING NUT JOINT CLAMP

- Galvanised construction for superior rust resistance
- Plastic sleeve less likely to receive shock
- Suitable for wire up to 4 mm (8 ga)
- Ideal for most farm conditions.

30047 **PK 25**

CUT-OUT SWITCH



PA40 CUT-OUT SWITCH HEAVY DUTY RED

- Long life stainless steel contacts
- Easily sighted on/off position
- UV stabilized for long life.

30040R **PK 10**

EARTHING

EARTH KIT

- Ensures effective connection between energizer and earth, maximising the performance of your electric fence.

Pack of 3 includes 3 x 2 m galvanised earth rods & 3 x galvanised earth clamps.

809101 **PK 3**

EARTH ROD / EARTH CLAMP

- Solid galvanised construction.

819188 **GALVANISED EARTH ROD 2 M EA**
821460 **GALVANISED EARTH CLAMP PK 3 (COMING SOON)**

SIGNS

PA7 WARNING SIGN

- Clear warning for safety
- Signs may be required by law – refer to your local bylaws for more information.

30007P **PK 10**

LIGHTNING PROTECTION KIT

LIGHTNING PROTECTION KIT

- Kit contains components needed to block & divert most voltage spikes from lightning strikes.

Includes spring choke, insulator, joint clamps & lightning arrestor.

808100 **LIGHTNING PROTECTION KIT PK 1**
814630 **REPLACEMENT LIGHTNING ARRESTOR EA**

FLOOD PROTECTION

PA38 FLOODGATE CONTROLLER

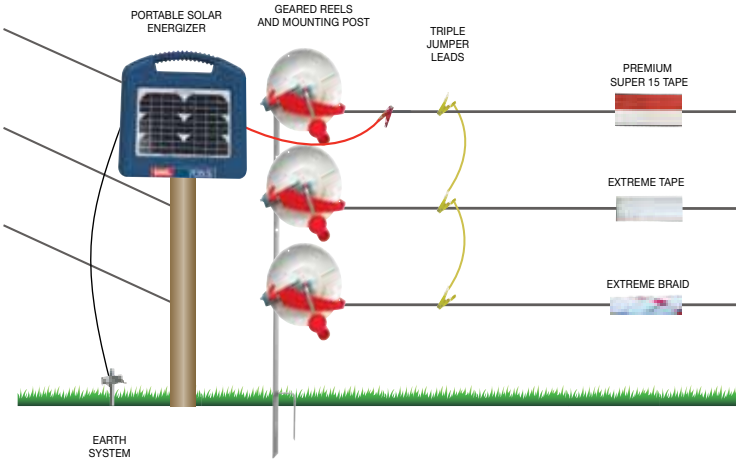
- Limits energy loss from heavy growth or flooding
- Fully sealed from insects and the environment
- Ideal for use near creeks, river beds & areas prone to flooding.

30038 **EA**

TEMPORARY ELECTRIC FENCING

Temporary Electric Fence System

PEL has a range of equine products for use in temporary electric fencing. Look for the horse logo to identify the PEL equine range.

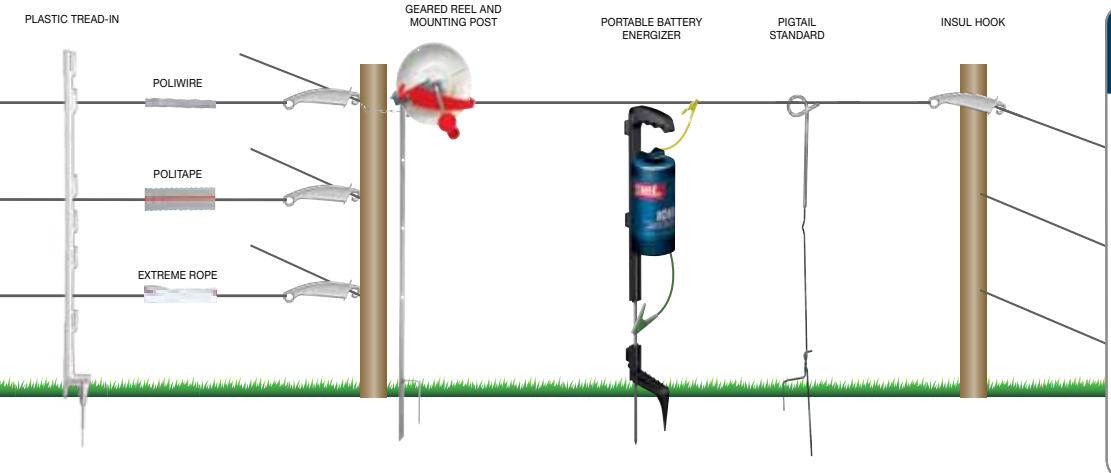


Temporary Electric Fencing helps increase production through providing a quick, easy and inexpensive way to subdivide paddocks.

This portable fencing solution gives you the versatility to strip graze, make temporary paddocks or pens and protect trees and crops from damage by stock.

Diagram is an example only. For more details on permanent fencing design visit www.pel.co.nz/resources.
Select Brochures then PEL Fencing Manual.

Strip grazing for controlled rotational grazing is an excellent method to improve pasture utilisation. For best early re-growth of pasture, back-fencing of areas already grazed is recommended. Generally, temporary fences are moved daily. The distance moved depends on the number of animals being grazed and the quality and quantity of pasture available. These products are recommended to ensure top performance of your temporary electric fence system.



TEMPORARY ELECTRIC FENCE SYSTEM CHECKLIST

TICK HERE	Do you have:
☐	Battery or solar powered energizer
☐	Reel(s)
☐	Tape, wire, braid or rope
☐	Tread-ins or pigtail standards
☐	Insul hook
☐	Jumper leads
☐	Mounting post(s)

Reels

PEL reels are unrivalled for their reliability and performance. They all feature a rugged, sturdy design. PEL geared reels are made of high impact polymers and galvanised steel frames and come with a 5 year bobbin UV warranty.

MEGA GEARED REEL

- Holds 1,000 m Poliwire or 400 m Politape
- 3:1 gear ratio with a solid steel crank
- Frame insulated from spool
- Use with carry handle or on mounting post
- UV stabilised for long life
- Galvanised steel frame
- Rugged steel locking system.

FSBGMRWH **EA**

GEARED REEL

- Holds 500 m Poliwire or 200 m Politape
- 3:1 gear ratio with a solid steel crank
- Frame insulated from spool
- Use with carry handle or on mounting post
- UV stabilised for long life
- Galvanised steel frame
- Rugged steel locking system
- Wire & Tape Guide to prevent tangling.

Includes: Red Insul Hook

FSBGFRWH **GEARED REEL EA**
818011 **PRE-WOUND POLITAPE 200 M WHITE EA**
818012 **PRE-WOUND POLIWIRE 500 M WHITE EA**

PR4E ECONO REEL

- Holds 500 m Poliwire or 200 m Politape
- 1:1 gear ratio
- Frame insulated from spool
- Use with carry handle or on mounting post
- UV stabilised for long life
- Galvanised steel frame
- Rugged steel locking system
- Innovative notch frame design for easy & secure fence attachment.

PR4E 80805I **WITH CARRY HANDLE EA**
812933 **PRE-WOUND POLITAPE 200 M WHITE EA**
812934 **PRE-WOUND POLIWIRE 200M WHITE EA**

PR3H MINI REEL

- Holds 200 m Poliwire or 100 m Politape
- 1:1 gear ratio
- Frame insulated from spool
- Use with carry handle or on mounting post
- UV stabilised for long life
- Galvanised steel frame
- Rugged steel locking system.

808259 **EA**

Temporary Fence Posts

All PEL temporary fence posts come with a 1 year warranty.

PIGTAIL

PA41 STEEL FOOT PIGTAIL STANDARD

- Galvanised spring steel construction
- UV stabilised for long life
- Corrosion resistant metal spike
- Unique rugged crimped foot design for durability
- 760 mm fence height (960 mm total height) with the PA41 & PA41-HD
- 900 mm fence height (1100 mm total height) with the PA41L - HD
- Attach PI87/PI88 insulators to create multiple fence heights.

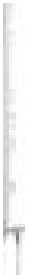
PA41L-HD 884024 **900 MM HEAVY DUTY PK 10**
PA41-HD 820396 **760 MM HEAVY DUTY PK 10**
PA41 884019 **760 MM PK 10**

TREAD-INS

PA81 NEVABREAK TREAD-IN

- Galvanised spring steel construction
- Up to five positions for Poliwire, Politape, 3 mm braid & 40 mm wide tape.
- UV stabilised for long life
- Corrosion resistant metal spike
- Unique rugged crimped foot design for durability
- Extra long length suitable for equine
- Attach PI87/PI88 insulators to create multiple fence heights.

PA81-XL 884057 **1700 MM PK 10**
PA81-L 884041 **1500 MM PK 10**
PA81 884040 **1100 MM PK 10**



PA80 PLASTIC TREAD-IN

- Strong lightweight construction
- Tread-in directly over steel spike for ease of use
- Six positions for Poliwire, Politape, 3 mm braid and 40 mm tape
- UV stabilised for long life
- Corrosion resistant metal spike
- 850 mm fence height (1,050 mm total height).

30080 **WHITE CT 50**

MOUNTING POSTS

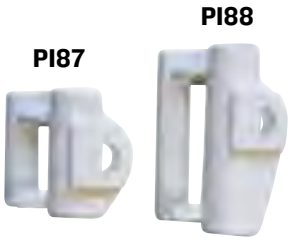
PR8 GALVANISED REEL MOUNTING POSTS

- Sturdy galvanised steel construction.

Includes anchor chain to secure to fence post.

814844 **3 HOLE EA**
814624 **4 HOLE EA**

POST ACCESSORIES



TREAD-IN INSULATOR

- Clip on to PA41 Pigtail and PA81 Nevabreak posts
- Designed for Poliwire and Politape up to 40 mm.

PI87 20087 **SMALL 12 MM PK 25**
PI88 20088 **LARGE 40 MM PK 25**

TAPE, WIRE, BRAID AND ROPE PRODUCTS

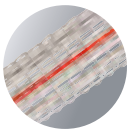
Select between the Extreme, Premium and Poli range depending on your temporary fence needs. All PEL poli products are UV stabilised for long life and come with a I year warranty.

The **PEL EXTREME** range provides the ultimate in conductivity and strength for demanding professional livestock control applications. Combining up to 5 tinned copper and 5 stainless steel strands for extreme shock power.

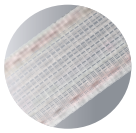
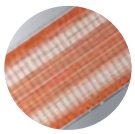
The **PEL PREMIUM** range provides greater conductivity and strength for more demanding professional livestock control applications. Up to I5 stainless steel strands for greater shock power.

The **PEL POLI** range provides effective conductivity and strength for professional livestock control applications. 6 stainless steel strands for shock power.

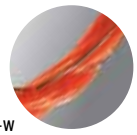
Tape I2 mm

		FEATURES	RESISTANCE (OHMS / KM)	VOLTAGE AT START OF FENCE (V)	VOLTAGE AT 100 M (V)	VOLTAGE AT 500 M (V)	VOLTAGE AT I KM (V)
POLITAPE I2 MM 30073W **WHITE 400 M ROLL** PA73W 30072W **WHITE 200 M ROLL** PA72W 30072O **ORANGE 200 M ROLL** PA72O		- 6 stainless steel strands - Ideal for temporary fencing and strip grazing - Tightly woven for superior strength - I2 mm width with white & orange weave for high visibility - UV stabilised for long life.	6,900	8,000	3,200	950	500

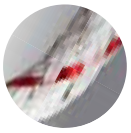
Tape 40 mm

EXTREME TAPE 40 MM 816081 **WHITE 200 M ROLL**		- 5 tinned copper strands - 5 stainless steel strands - 99 x more conductive than standard Politape - Ideal for long distance, permanent and semi-permanent fencing - 40 mm width with white and orange weave for ultimate visibility - UV stabilised for long life.	70	8,000	7,900	7,500	7,000
PREMIUM SUPER I5 TAPE 40 MM 30055RW **RED/WHITE 50 M** PA55-RW		- I5 stainless steel strands - 2.3 x more conductive than standard Politape - Ideal for permanent & semi-permanent fencing or high traffic areas such as gateways - 40 mm width for high visibility - UV stabilised for long life.	3,000	8,000	5,000	2,000	I,I00
PREMIUM TAPE 40 MM 818010 **ORANGE 50 M ROLL**		- I0 stainless steel strands - I.7 x more conductive than standard Politape - Ideal for permanent & semi-permanent fencing or high traffic areas such as gateways - 40 mm width for high visibility - UV stabilised for long life.	4,000	8,000	4,400	I,600	900

Wire

	FEATURES	RESISTANCE (OHMS / KM)	VOLTAGE AT START OF FENCE (V)	VOLTAGE AT 100 M (V)	VOLTAGE AT 500 M (V)	VOLTAGE AT 1 KM (V)
POLIWIRE  30071W **WHITE 500 M ROLL** PA71-W 30071O **ORANGE 500 M ROLL** PA71-O 30070W **WHITE 200 M ROLL** PA70-W 30070O **ORANGE 200 M ROLL** PA70-O	- 6 stainless steel strands - An economical choice for temporary fencing and strip grazing - UV stabilised for long life - Available in white or orange.	6,800	8,000	3,400	1,000	550

Braid

	FEATURES					
EXTREME BRAID 7 MM  816083 **WHITE 7 MM 200 M ROLL**	- 4 tinned copper strands for ultimate conductivity - 4 stainless steel strands for ultimate strength - 68 x more conductive than standard Poliwire - Increased shocking & stopping power, ideal for long lengths of temporary and semi-permanent fence - White with red weave for ultimate visibility - UV stabilised for long life.	100	8,000	7,800	7,300	6,700

Rope

	FEATURES					
EXTREME ROPE 6 MM 816082 **WHITE 200 M ROLL**	- 3 tinned copper strands - 3 stainless steel strands - 52 x more conductive than standard Poliwire - Ideal for temporary fencing and strip grazing - 6 mm diameter for greater visibility and strength - UV stabilised for long life.	130	8,000	7,800	7,100	6,300

General Accessories

All PEL general accessories come with a 1 year warranty.

LEADS

JUMPER LEADS

- Recommended for ensuring good electrical connections in temporary fencing
- Joint clamps are recommended for permanent electric fencing.

PA30 809057 **SINGLE JUMPER LEAD EA**
PA31 809055 **TRIPLE JUMPER LEAD EA**

HANDLES

PA50-W INSUL HOOK

- Used when an insulated connection is required
- Strong, UV resistant design
- For use in temporary fence application
- Slim design for ease of use.

30050W **CT 30**

HARDWARE

WIDE TAPE 40 MM JOINER

- Use to join up to 40 mm wide tape
- Made from stainless steel.

81571I **PK 5**

EARTH SYSTEMS

Your earth system is the most important component of your electric fence. An effective earth system will optimise the performance of your electric fence.

Setting up your Earth System

Installing your Energizer

Before installing make sure you have read all the instructions provided with your energizer.

INDOOR INSTALLATION

Mains, Unigizer™ or battery powered energizer

- Mount out of reach of children and animals
- Mount a mains powered energizer near a power point.

OUTDOOR INSTALLATION

Unigizer or battery powered energizer

- Mount out of reach of children and animals
- If necessary, build a protective box or fence around the energizer and battery
- Where possible, connect the energizer to the middle of the fence.

SOLAR INSTALLATION

Solar powered energizers

- Mount out of reach of children and animals
- If necessary, build a protective fence around the solar installation
- Where possible, position the energizer and solar panel(s) in the middle of the fence
- Adjust the solar panel(s) to face north in the southern hemisphere and south in the northern hemisphere
- Tilt the solar panel(s) to face the midday sun.

Refer to your product user manual for more information about energizer installations or visit www.pel.co.nz/resources. Select Brochures then PEL Fencing Manual. For further assistance, contact your local Tru-Test Group Area Sales Manager or PEL retailer/distributor for advice. You'll find their details online at www.pel.co.nz. Alternatively, refer to the back cover for details of your local Tru-Test Group office.

Earthing your Energizer

UNDERSTANDING EARTHING

What is an earth system?

The earth system consists of a number of earth rods that provide an effective (low resistance) path for the electrical current to return to the energizer's earth terminal. Larger energizers with large fence lines require more earthing rods.

How does earthing work?

For an electric fence to give an electric shock the current produced by an energizer must complete a full circuit. The current leaves the energizer and moves along the fence wires through the animal, into the soil and back to the energizer via the earth system. If the earth system is ineffective the animal will receive an inadequate shock.

What factors affect your earth system?

Dry, sandy or non-conductive soil (e.g. volcanic soil) provides an ineffective earthing system. If you have this type of soil, it's a good idea to 1) use additional earth rods or 2) choose a better location for the earth system (such as damp soil) or 3) consider an alternative method of earthing such as the Fence Wire Earth Return.

Contact your local Tru-Test Group Area Sales Manager or PEL retailer/distributor for advice. You'll find their details online at www.pel.co.nz. Alternatively, refer to the back cover for details of your local Tru-Test Group office.

Setting up your Earth System

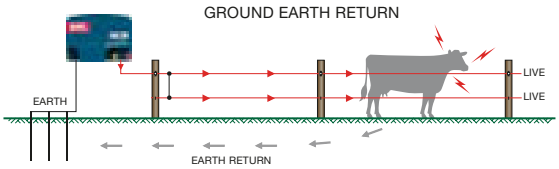
STEP 1

CHOOSE THE RIGHT SYSTEM FOR YOU

Option 1 – Ground Earth Return

Recommended where soil is conductive.
This system is suitable for most moist soils.

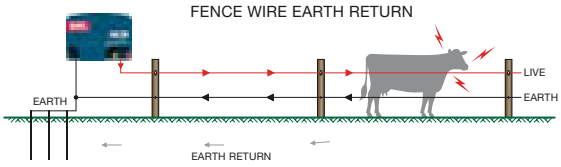
Current flows through the animal and the ground back to the earth rods.



Option 2 – Fence Wire Earth Return

Recommended where soil is not conductive. If the soil is dry, sandy or volcanic it is usually not conductive.

The fence is constructed using both live and earth wires. If the animal touches the live wire, the current flows through the animal and the ground to the earth rods and back to the energizer. If the animal touches the live wire and the earth wire the current flows through the ground and fence earth wire back to the energizer



STEP 2

SELECT THE SITE FOR YOUR EARTH SYSTEM

A suitable place for an earth system is:

- At least 10 m away from other earth systems, e.g. house mains, underground power or phone lines
- Away from stock or other traffic that could interfere with the installation
- Easily accessible for maintenance
- Where there is damp soil all year round, e.g. shaded or swampy areas.

TIPS

1. In some situations it is not possible to locate the earth system close to the energizer. As an alternative try using the existing fence line to connect to a remote earth system.
2. It may be necessary to water the earth system in dry weather to improve soil conductivity.

STEP 3

INSERT THE EARTH RODS

The number of earth rods required depends on the type of energizer you're using to power the fence and the soil conductivity. It is recommended that you consult with your local retailer/distributor for the correct number of earth rods to suit your specific location.

1. Space the required number of 2 m earth rods at least 3 m apart.
2. Ensure that the earth rods protrude out of the soil by 100 mm so they can be easily connected.
3. Connect the earth rods in a series using earth clamps and insulated cable* in one continuous length without joins.

*Note you will need to strip small sections of the insulation away from the cable to connect the earth clamp/earth rod.

STEP 4

TESTING YOUR EARTH SYSTEM

Test your earth system to ensure it's working properly.

To do this:

1. Turn off the energizer.
2. Short circuit the fence to ground at least 100 m away from the energizer. This can be done by laying steel rods or pipes against the fence. In dry or sandy soils drive the rods into the soil up to 300 mm.
3. Turn on the energizer.
4. Use a digital voltmeter (see pg 26) to measure the fence voltage. It should read less than 2 kV. If not, repeat steps 1-3 using more steel rods or pipes.
5. Attach the voltmeter clip to the last earth rod of the earthing system.
6. Insert the voltmeter probe into the soil at the full length of the leads.
7. The voltmeter reading should be no more than 0.3 kV. If the reading is higher than this, the earth system is inadequate. See the earthing checklist opposite, dd more earth rods or find a better location for your earth system.

EARTH SYSTEM CHECKLIST	TICK HERE
All wires are joined securely	☐
Connections to earth rods are secure	☐
Earth rods are at least 3 m apart	☐
Earth rods are at least 2 m long	☐
There are a sufficient number of earth rods	☐
All parts of the earth system are made of the same metal	☐
The earth rods are driven deeply into the soil (100 mm exposed)	☐
Earth rods are a minimum of 10 m away from buildings or other electrified earth systems, e.g. house mains, underground power or phone lines.	☐

Product Notes

Product Notes

LOCAL STORE/DEALER

Staple business card here

CONTACT:

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Freephone: 0800 TRUTEST (878 837) +64 9 574 8888 Orders Facsimile: +64 9 574 8784.

AUSTRALIA Tru-Test Pty Ltd, Block 8 / 18 Torbey St, Sunnybank QLD, 4109 Australia.
Freephone: 1800 641 324 Orders Facsimile: 1800 831 847.

INTERNATIONAL Please see our website for contact details or contact Tru-Test Group in New Zealand.

www.pel.co.nz

For more information on Tru-Test Group and our brands, visit www.tru-test.com

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